

U. S. DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
MEDFORD DISTRICT
BUTTE FALLS RESOURCE AREA

EA COVER SHEET

RESOURCE AREA: Butte Falls

EA Number: OR-115-05-01

ACTION/TITLE: Indian Creek Culvert Replacement

LOCATION: Indian Creek, Township 34 S. Range 1 W. Section 23 Willamette Meridian,
Jackson County, Oregon

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U. S. DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
MEDFORD DISTRICT
BUTTE FALLS RESOURCE AREA

ENVIRONMENTAL ASSESSMENT

for

INDIAN CREEK CULVERT REPLACEMENT

EA Number OR-115-05-01

Project Location:

Indian Creek, Township 34 S. Range 1 W. Section 23
Willamette Meridian, Jackson County, Oregon

Medford District Office, Butte Falls Resource Area

Date 1/3/2005

FINDING OF NO SIGNIFICANT IMPACT (FONSI) and DECISION RECORD
for the Indian Creek Culvert Replacement; EA Number OR-115-05-01

The proposed action and alternative are in conformance with the Medford District's Resource Management Plan (RMP), Record of Decision (ROD) approved on April 14, 1995. The project is consistent with RMP objectives designed to meet Aquatic Conservation Strategy (ACS) goal

There are no wetlands, wild and scenic rivers, known hazardous waste areas, areas of religious concern, prime nor unique farmlands within the project area. The project area does not qualify for potential wilderness designation. No adverse impacts are anticipated to the fisheries, lands, or minerals resources. No threatened or endangered plants or wildlife, nor cultural or paleontological resources were observed in the area. Should threatened or endangered plants or wildlife, or cultural or paleo-anthropoc resources be discovered, they would be protected.

I have reviewed this environmental assessment including the explanation and resolution of any potentially significant environmental impacts. I have determined that the proposed action will not have any significant impacts on the human environment and that an EIS is not required. I have determined that the proposed action is in conformance with the approved land use plan. It is my decision to implement the proposed action and that no mitigation measures are necessary.

Decision Record & Rationale

The decision is to implement the proposed action as described in Alternative 2.

Jim Kector, Acting

1/20/05

I. INTRODUCTION

Indian Creek is located southeast of the town of Shady Cove, Oregon. The Butte Falls Resource Area is proposing to replace twin undersized culverts that are blocking salmonid migration and causing flooding and erosion. The culverts which exist on Bureau of Land Management (BLM) road # 34-1-23 would be removed and replaced with a bridge or a bottomless structure such as a pipe arch or conspan.

This EA tiers to: (1) *The Final EIS and Record of Decision (ROD)* dated June, 1995 for the *Medford District Resource Management Plan* dated October, 1994; and (2) the *Final Supplemental EIS on Management of Habitat for Late-Successional and Old Growth Forest Related Species Within the Range of the Northern Spotted Owl* dated February, 1994; and (3) *The Record of Decision for Amendments to Forest Service and Bureau of Land Management Planning Documents Within the Range of the Northern Spotted Owl* and its attachment A, entitled *the Standards and Guidelines for Management of Habitat for Late-Successional and Old-Growth Forest Related Species Within the Range of the Range of the Northern Spotted Owl* dated April 13, 1994.

II. PURPOSE AND NEED FOR ACTION

The Butte Falls Resource Area and the Upper Rogue Watershed Association (URWA) have identified the Indian Creek culvert on BLM road # 34-1-23 as a high priority for replacement. A key factor for this prioritization is based on the presence of fish species that carry economic and social importance to the region. Coho salmon (*Oncorhynchus kisutch*), steelhead trout (*Oncorhynchus mykiss*), and cutthroat trout (*Oncorhynchus clarki clarki*) are present within this creek. Furthermore, coho salmon are listed as a threatened species under the Endangered Species Act. Indian Creek contains approximately 6 miles of coho salmon and trout habitat.

The current crossings are a risk to the salmonid populations within the watershed because they restrict fish passage during high flows and increase the threat of sedimentation through the risk of fill failure. The culverts are undersized and are not designed to withstand 100-year flood events. They also constrict the stream channel and create flows too swift for fish to swim through, blocking fish migration to 3 miles of upstream habitat under high flow conditions. Flooding of this road crossing occurs on a regular basis and contributes large amounts of sediment to this stream. The crossing failed completely during the January 1, 1997 flood and was replaced with the current twin culverts; however, this was only meant to be a temporary fix and was not designed as a permanent crossing. Replacement of these culverts with a structure designed for 100-year flood events would benefit the fishery by reestablishing the salmonids' historical habitat and reducing the risk of sedimentation through a fill failure. It will also benefit the private landowners by providing year-round access to private property and BLM lands.

The purpose of this Environmental Assessment (EA) is to assist in the decision-making process by assessing the environmental and human effects resulting from implementing the proposed project and/or alternatives and to analyze the effects of improving year-round fish passage and stream crossing capacity during high water flood events in Indian Creek. The EA will also assist

in determining if an Environmental Impact Statement (EIS) needs to be prepared or if a Finding of No Significant Impact (FONSI) is appropriate.

A. Conformance with Existing Land Use Plans

The proposed projects are in conformance with the BLM land use plans for the subject areas. They are consistent with management objectives for the public lands identified in the Record of Decision for Amendments to Forest Service and Bureau of Land Management Planning Documents Within the Range of the Northern Spotted Owl (SEIS), approved April 13, 1994, and the Record of Decision and Resource Management Plan for the Medford District (RMP), approved June 1995.

B. Relationship to Statutes, Regulations, and Other Plans

The proposed action is in conformance with the direction given for the management of public lands in the Medford District by the Oregon and California Lands Act of 1937 (O&C Act) and the Federal Land Policy and Management Act of 1976 (FLPMA). The BLM is directed to manage the lands covered under the O&C Act for permanent forest production under the principles of sustained yield. BLM is also required to comply with other environmental and conservation laws, such as the Endangered Species Act of 1973 and the Water Pollution Prevention and Control Act (Clean Water Act), while implementing the mandates given by FLPMA and the O&C Act. The proposed action is in conformance with these laws.

This EA is being prepared to determine if the proposed action would have a significant effect on the human environment, thus requiring the preparation of an EIS as prescribed in the National Environmental Policy Act of 1969. It is also being used to inform interested parties of the anticipated impacts and provide them with an opportunity to comment on the proposal. Further, the EA is being used to arrive at a final project design to meet a variety of resource issues.

Finally, the EA is also being used to provide the decision maker, the Butte Falls Resource Area Field Manager, the most current information relating to this project upon which to base a decision.

C. Decisions to be Made Based on the Analysis

The Butte Falls Resource Area Field Manager must decide if the impacts of implementing the proposed action or the alternative would result in significant effects to the human environment, thus requiring that an EIS be prepared before proceeding with the proposed action as prescribed in the National Environmental Policy Act of 1969. The field manager must decide if the BLM should replace undersized culverts to provide for fish passage in the Indian Creek subwatershed.

D. Summary of Scoping Activities

The Oregon Department of Fish and Wildlife (ODFW), the Oregon Division of State Lands (DSL) and the U.S. Army Corp of Engineers (ACOE) were involved in the project review and permitting process. The URWA was also involved in the development of this project.

E. Issues Considered But Not Analyzed in Detail

Many issues were discussed during the interdisciplinary team (IDT) meetings for these proposals. After discussing the issues, the IDT determined that while the following issues and concerns were real, many were outside the scope of the EA and others were not major issues for this proposal that would affect the human environment.

- a) T&E and Special Status plants - surveys have been completed and no sites were found within the proposed project area.
- b) T&E Wildlife - surveys have been completed and no sites were found within the proposed project area.
- c) Visual Resources Management (VRM) - meets RMP VRM standards.
- d) Mining - no active mining claims in the area
- e) Fire - risk of an ignition would be minimized by project design features.
- f) Hazardous Materials - would be mitigated by project design.
- g) Cultural resources—no known locations within project sites.

III. ALTERNATIVES INCLUDING THE PROPOSED ACTION

A. Alternative 1: No Action

Analysis of this alternative provides a baseline against which the effects of the action alternatives can be compared. For this EA, the No Action Alternative is defined as not replacing the existing culverts. Under this alternative the creek crossing would continue to pose a threat to the salmonid populations within the Indian Creek subwatershed. The fish within the watershed would continue to be blocked from several miles of historical spawning and rearing habitat. The culverts would continue to degrade and the risk of sedimentation would increase with time because of the risk of a fill failure around the culverts due to the culvert plugging or failing structurally.

B. Alternative 2: Fish Passage Improvement

The Butte Falls Resource Area is proposing to replace the twin culverts with a bridge or bottomless structure such as a pipe arch or conspan. These structures would maintain or simulate the natural creek bottom which would no longer inhibit fish movement. The replacement of these culverts would allow the salmonid species within the watershed the ability to reach historical spawning and rearing habitat for maintenance of populations, access to prey, avoidance of predators, and to find areas of refuge during winter flows.

Proposed activities for this project include removal of the twin culverts and replacing the structures with a single bridge or bottomless structure. The culverts will be removed by excavation of approximately 20 cubic yards of soil. The road grade will be elevated at both ends of the project by building up the road bed by approximately 6 feet. Additional overflow pipes will be installed at two locations that are upstream and downstream of the crossing. Soil stabilization control will include use of silt fencing or straw bales, seeding with native grasses, and mulching. Alternate by-pass routes for local traffic will be constructed and the stream will be

rerouted around the construction site through a pipe for the duration of the project. All instream work will occur between June 15th and September 15th in accord with ODFW requirements.

C. Project Design Features (PDFs):

The following PDFs were developed by Medford District fisheries and engineering specialists to reduce impacts of culvert removal/replacement work.

- At all stream crossings the approach will be as near a right angle to the stream as possible to minimize disturbance to stream banks and riparian habitat.
- Road crossings on all fish-bearing streams will be designed to maintain natural streambed substrate and site gradient where feasible, while minimizing long term maintenance needs; the specific design shall also be based on expected longevity and economics.
- Width of a crossing structure will be at least as wide as the mean bankfull width at the crossing site; to be measured by a qualified professional.
- Divert the stream around the work area in a manner (e.g. a pipe or lined ditch) that will minimize stream sedimentation. Require the contractor to submit an approved plan for water diversion before instream work begins. The diverted stream will not be returned to the channel through the project area until all instream work has been completed. The resource area fish biologist will be consulted before deviating from this practice. If it is impractical to dewater a stream channel due to factors such as deep channel incision or high gradient, strongly consider scheduling the work toward the end of the instream work period, rather than at the beginning.
- Reduce movement of sediment downstream from the project site with the use of straw bales, geotextile fabric or coconut fiber logs/bales immediately downstream of the work area
- Wet or green (wet: fresh enough to flow; green: hardened but less than 21 days old) cement, new or old asphalt has acute and chronic adverse effects on aquatic life and shall not be allowed to enter a stream. This includes water used to clean tools and wash out cement trucks after delivering material. Again, if the stream is dewatered before construction begins, aquatic species should be unaffected.
- To restore streambed habitat complexity inside new crossing structures, consider lining the bottom of the crossing structure with 1-3 foot diameter boulders. (The streambed is usually uniform following preparation of a new site or when replacing an existing pipe. Boulders that are placed in replacement pipes must be large (high) enough so that they are not buried by streambed substrate that may have been deposited immediately upstream of the inlet of the original pipe.) Use a prediction model to determine the size of boulder needed to ensure stability at the estimated 100 year peak flow.
- Fill material over a stream crossing structure will be stabilized as soon as possible after

construction has been completed, normally before October 15. Work will be temporarily suspended if rain saturates soils to the extent that there is potential for environmental damage, including movement of sediment from the road to the stream.

- Bare soil areas will be mulched with hydro-seeding, weed-free straw, bark chips, etc and native seed or other approved seed mix prior to fall rain or when moisture conditions are appropriate to discourage invasion of noxious plant species and to reduce soil erosion.

- Location of waste stockpile and borrow sites will be at least one site potential tree length from a stream where sediment-laden runoff can be confined unless there is no way for sediment to move off-site.

- The contractor will be notified that he is responsible for meeting all state and federal requirements for maintaining water quality. Standard contract stipulations will include the following:

- Heavy equipment will be inspected and cleaned before moving onto the project site in order to remove oil and grease, noxious weeds and excessive soil.

- Hydraulic fluid and fuel lines on heavy mechanized equipment must be in proper working condition in order to minimize leakage into streams.

- Waste diesel, oil, hydraulic fluid and other hazardous materials and contaminated soil near the stream will be removed from the site and disposed of in accordance with DEQ regulations. Areas that have been saturated with toxic materials will be excavated to a depth of 12 inches beyond the contaminated material or as required by DEQ.

- Equipment refueling will be conducted within a confined area outside the stream channel such that there is minimal chance that toxic materials could enter a stream.

- Use spill containment booms or other equipment as required by DEQ.

- Equipment containing toxic fluids will not be stored in a stream channel at any time.

- Consider constructing a control weir or rock apron at a culvert outlet as insurance that water velocity through a new culvert will not cause “perching”: (a) a “control weir” (log or boulders) (Porior 00) is installed about 3 channel widths downstream of the culvert to back water into the pipe outlet (b) an rock apron consists of burying 1-3 foot diameter rock at the culvert outlet across the stream channel and downstream for a distance equal to 2-3 culvert diameters such that tops of boulders are the same elevation as the bottom of the culvert.

- When designing a temporary stream crossing, consider using the following materials: (a) 1 to 3 inch diameter washed, uncrushed river rock as fill over the culvert (the gravel size will provide good spawning substrate for steelhead and salmon after the pipe is removed). One inch minus aggregate and soil are unacceptable fill material around a temporary culvert (b) geotextile fabric

over the river rock, and (c) surface aggregate when needed. Surface aggregate will be removed from the channel before pulling the culvert and disposed of properly so that fines will not enter the stream.

- After a temporary culvert crossing is removed, leave river rock in the streambed and breach the fill rock to allow free movement of water. Failure to breach the gravel may cause the stream to jump the channel onto the road surface during peak flows.

- When removing a culvert and not replacing it, pull back the slopes to the natural slope or at least 1:1 to minimize sloughing, erosion and potential for the stream to undercut streambanks during periods of high streamflow. Make sure that the entire bankfull width stream channel (as measured by a qualified professional) is opened to peak flows, not just the area previously occupied by the culvert, which may have been undersized. When culvert fill depth exceeds capability of equipment to remove all of it, consider placing a rock blanket in the bottom of the draw to slow the erosion rate.

In addition to the above PDFs, the following will also be applied to the project:

- The in-stream work period would be between June 15th and September 15th of the same year in accordance with State of Oregon regulations. All other construction work would be completed from May 15th to October 15th.

- Coordination with utility companies will be done to prevent damaging fiber optics or other utility lines buried below the road surface.

- Wastewater from the project activities and construction site de-watering shall be routed to a settling pond or an area outside the ordinary high water line to allow removal of fine sediments and other contaminants prior to being discharged.

IV. AFFECTED ENVIRONMENT

A. General Description of the Proposed Project Area

A general description of the land areas and resources in the Butte Falls Resource Area is presented in Chapter 3 of the Final Medford District Resource Management Plan/Environmental Impact Statement (RMP 1995).

Indian Creek is a direct tributary to the Rogue River located southeast of the town of Shady Cove. The stream channel at the project site is unconstrained with a wide floodplain in a broad valley bottom. Land use includes rural residential, timber harvest, and livestock grazing.

1. Fisheries/Aquatic Habitat

The proposed project is located in the Indian Creek subwatershed within the Rogue River basin.

A variety of resident and anadromous fish species are found in Indian Creek. Anadromous fish species that utilize this stream and its tributaries include coho salmon, steelhead trout, and Pacific lamprey. Native resident fish species include cutthroat trout, rainbow trout and sculpin species.

Southern Oregon/Northern California (SONC) coho salmon (*Oncorhynchus kisutch*), a threatened fish species, utilizes the Indian Creek watershed for spawning and rearing. The National Marine Fisheries Service (NMFS) listed coho salmon in the SONC Evolutionarily Significant Unit (ESU) on May 6th, 1997 as “threatened” under the Endangered Species Act. SONC Critical Habitat has been designated by NMFS and includes all stream reaches currently or historically accessible to anadromous fish. Essential Fish Habitat (EFH) has also been designated under the Magnusen-Stevens Fishery Act and is identical to SONC Critical Habitat.

A comprehensive aquatic habitat inventory was completed in 1999 by ODFW in the Indian Creek subwatershed. Major habitat features found to be impaired are bank stability, pool complexity and quantity, large wood abundance, and riparian condition. Limiting factors within this watershed have been identified as low summer flows, manmade barriers to fish, and a lack of large woody debris.

Summer flows are influenced by a large irrigation storage reservoir located on private lands in Section 20. Stretches of this stream periodically become dry due to irrigation withdrawals. Water quality is negatively affected by this use, and is contributing to summer water temperatures exceeding state standards.

2. Hydrology/Water Quality

Indian Creek is located in the Rogue River/Indian Creek 6th field subwatershed within the Rogue River/Shady Cove 5th field watershed. The Indian Creek subwatershed contains approximately 25,218 acres with approximately 9,777 acres of BLM administrated lands, which equates to about 39 percent of the lands in the subwatershed being managed by BLM. The watershed receives approximately 30-40 inches of rain per year. The climate of this watershed is a Mediterranean type with hot, dry summers and cool, wet winters. Summer high temperatures range from the 80s to the high 90s with occasional daytime temperatures reaching 100 plus degrees Fahrenheit (F). Winter lows often drop to 10 to 20 degrees F.

Indian Creek fails to meet the Oregon Department of Environmental Quality (ODEQ) summer standard for dissolved oxygen (DO) from June 1 to September 30th. Indian Creek from the mouth to river mile 5.2 is classified as water quality limited under the Clean Water Act (CWA) and is on the 303(d) list.

V. ENVIRONMENTAL CONSEQUENCES

A. Effects of Implementing Alternative 1 (No Action)

Fisheries/Aquatic Habitat

1. Direct and Indirect Effects

With the No Action alternative, the salmonid species within the watershed would continue to be blocked from the historical spawning and rearing areas upstream of the culverts. Barriers to dispersal may delay or preclude recovery of fish species and increase chances of extinction. Furthermore, salmonid populations would be more likely to be severely impacted in the event of a severe flood event due to the likelihood of road damage and/or fill failures adjacent to the culverts. Maintaining this current situation is expected to continue to directly and indirectly result in continued negative effects of reduced freshwater survival of salmonids.

2. Short-term Uses vs. Long-term Productivity

Salmonid productivity is expected to be negatively impacted by delaying or foregoing culvert replacement in the short-term (1-5 years) and long term (>5 years). A higher risk of stream sedimentation from culvert failure is likely in the long-term (>5 years) due to the progression of culvert deterioration and the risk of a large storm event causing damage. This would be expected to negatively affect aquatic habitat and subsequently, the productivity of fisheries and aquatic resources in the watershed over the short and long-term.

3. Irreversible/Irretrievable Commitments of Resources

No irreversible commitments of resources are anticipated.

4. Cumulative Effects

Due to the risk of a culvert failure during a high flow event, current levels of stream sedimentation could be increased. This would be expected to have a negative cumulative effect on fisheries and aquatic resources. Foregoing the culvert removal would continue to maintain current aquatic habitat conditions. This would be expected to maintain the current negative cumulative effect of degraded aquatic habitat and limited access to additional habitat.

Hydrology/Water Quality

1. Direct and Indirect Effects

Under the no action alternative the twin pipes on Indian Creek would not be replaced with a bridge or bottomless structure such as a spanspan or pipe arch. This alternative maintains the current conditions of the stream channel at the twin pipe crossing. There would be no improvement to fish passage as high velocities would remain a barrier to fish. The stream would continue to overflow at the crossing during high flow events causing erosion of the road and sedimentation of the stream channel. The twin pipes would remain at risk for failure during large storm events by becoming plugged with debris. If this crossing fails again, another large amount of sediment would be washed downstream potentially degrading aquatic habitat.

2. Cumulative Effects

This alternative would maintain the current condition and would not add to the cumulative effects. However, the crossing would remain a barrier to fish during high flows. This crossing would also continue to cause sedimentation to the stream channel during high flow events as water flows over the road when the capacity of the two culverts is reached. The potential for a catastrophic failure would remain which would result in a large amount of sediment being transported downstream affecting aquatic habitat. This alternative would not help reduce the cumulative effect of road related sediment.

B. Determination of Effects on SONC Coho Salmon, SONC Critical Habitat, and EFH from Implementation of the No Action Alternative:

May Affect, Likely to Adversely Affect (LAA)

Due to the increasing likelihood of environmental damage caused from the degrading culverts and the continued blockage from historical habitat, the No Action Alternative is likely to result in more than a negligible chance of “take” of coho salmon found within the Indian Creek subwatershed. As a result, the No Action Alternative is considered “likely to adversely affect” SONC coho salmon, and adversely modifies SONC Critical Habitat and EFH in both the short and long term.

C. Effects of Implementing Alternative 2

Fisheries/Aquatic Habitat

1. Direct and Indirect Effects

The proposed culvert replacement project could have direct negative effects from the operation of heavy equipment within the riparian reserve and the stream channel. The use of heavy equipment within the stream channel could potentially injure or crush individual fish. It is likely that two or three trees less than 6" dbh may be removed as well as some shrubs may be damaged, but these would be left on site. Indirectly, fish and aquatic resources could be negatively affected from low level, localized increases to baseline stream turbidity and sediment levels in the short-term through the construction activities(<1 year). Conversely, implementation of the proposed action would be expected to improve aquatic habitat quality and diversity by opening up several miles of historic fish habitat, and by reducing sedimentation that occurs when high flows wash over the crossing. This could directly benefit fishery resources over the long term by improving freshwater survival and increasing potential fish production within the watershed.

2. Short Term Uses vs. Long Term Productivity

Implementation of the proposed project could have a negative effect on fisheries and aquatic resources in the short-term (<1 year) by adding a limited amount of stream sediment. Implementation of the appropriate PDF's is expected to reduce the anticipated negative, cumulative effects of the proposed actions to negligible levels. Overall, implementation of the proposed actions would be expected to improve current conditions by helping restore historic conditions within the watershed in the long term.

3. Irreversible/Irretrievable Commitments of Resources

No irreversible commitments of resources are anticipated.

4. Cumulative Effects

Implementation of the proposed culvert replacement could have a negative effect on fisheries and aquatic resources in the short-term by adding to current high levels of stream sediment. However, by following the appropriate PDF's, these effects would be minimized. A long-term, positive cumulative effect to fish and aquatic resources is anticipated from opening up a total of approximately 3 miles of anadromous salmonid habitat, and by reducing the risk of stream sedimentation and crossing failure.

Overall, implementation of the proposed actions would be expected to have a positive cumulative effect to fisheries and aquatic resources by improving aquatic habitat conditions and allowing uninhibited fish passage, thereby improving freshwater survival of salmonid species.

Hydrology/Water Quality

1. Direct and Indirect Effects

This alternative would remove the existing twin pipes and replace them with a bridge or another bottomless structure such as a conspan or pipe arch. The removal of the existing pipes would cause some small amounts of sediment to enter the stream channel. This small amount of sediment entering the stream would be of short duration and would be mitigated by using project design features (PDFs). The bottomless structure would be designed to allow for the 100 year flood and associated debris to pass the structure. This design would minimize the potential for this structure to become plugged and ultimately fail again. If the current twin culverts failed again, there would be a much greater input of sediment than from installing a new structure.

2. Cumulative Effects

Alternative two would reduce cumulative effects of road related sediment by reducing the amount of erosion at the inlet and outlet of the current twin culverts, as well as reducing the potential for a mass failure which would transport a large amount of sediment downstream. This project would have a beneficial long term cumulative effect by reducing the chance of mass failure and allowing sediment and debris to move downstream, which would improve aquatic habitat.

D. Determination of Effects on SONC Coho Salmon, SONC Critical Habitat, and EFH from Implementation of the Proposed Alternative:

May Affect, Likely to Adversely Affect (LAA)

Fish and aquatic habitat could potentially be harmed by construction activities in the stream

channel during culvert replacement. It is expected that Alternative 2 is likely to result in more than a negligible chance of “take” of these species. As a result, Alternative 2 is considered “likely to adversely affect” SONC coho salmon, and adversely modify SONC Critical Habitat and EFH in the short term, while providing long term benefits to the species and habitat.

VI. CONSULTATION

Fish and aquatic habitat could potentially be harmed from heavy equipment working in the stream channel and by sediment released during construction. As a result, the proposed action is considered “likely to adversely affect” SONC coho salmon, and will adversely modify SONC Critical Habitat and EFH in the short term. This project is covered under the Programmatic Biological Opinion for the Southwestern Oregon Province issued by NMFS on October 18, 2002 under the category of “Aquatic and Riparian Habitat Projects”.

VII. PERSONS OR AGENCIES CONSULTED

The National Oceanic and Atmospheric Administration Fisheries, ODFW, DSL, and the ACOE were involved in the review and permitting of this project.

This EA was made available for public review in February 2005 by Public Notice.